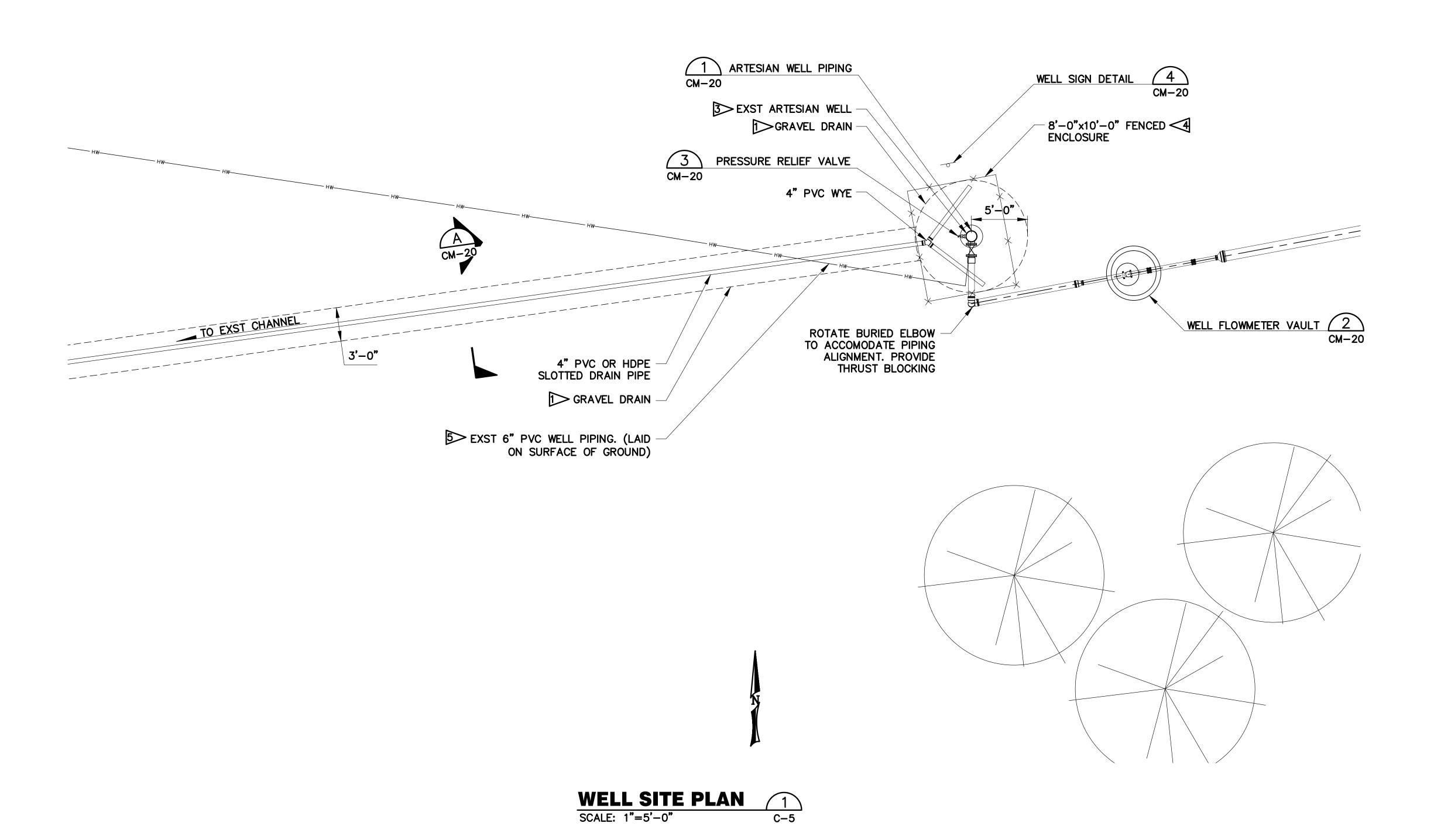
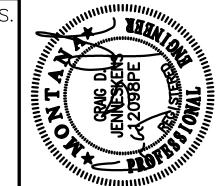


CONSTRUCTION NOTES:

- GRAVEL DRAIN SHALL BE INSTALLED AROUND WELL CASING TO A RADIUS OF 5'-0" AND TO THE DEPTH OF THE EXISTING CONCRETE COLLAR AROUND WELL CASING (APPROX 4'-0"). GRAVEL DRAIN SHALL EXTEND TO EXISTING CHANNEL (APPROX 100') AT A DEPTH OF 3'-0" AND A WIDTH OF 3'-0". DAYLIGHT 4" PVC OR HDPE SLOTTED DRAINAGE PIPE AT CHANNEL. MAINTAIN POSITIVE SLOPE OF GRAVEL DRAIN & PIPE TO CHANNEL.
- 2. INSTALL GRAVEL DRAIN WITH RUBBER-TIRED BACK HOE OR OTHER SMALL HOE TO MINIMIZE GROUND DISTURBANCE AROUND ARTESIAN WELL.
- CONTRACTOR SHALL NOT, UNDER ANY CIRCUMSTANCES CLOSE ANY VALVES ON THE ARTESIAN WELL. CLOSING BOTH VALVES MAY CAUSE PERSONAL INJURY. ARTESIAN PRESSURE EXCEEDS 300 PSI AND WELL INTEGRITY WILL BE COMPROMISED IF VALVES ARE CLOSED.
- AFTER WELL PIPING, PRV AND GRAVEL DRAIN ARE INSTALLED, CONTRACTOR SHALL INSTALL A CHAIN LINK FENCE ENCLOSURE W/ LOCKABLE GATE. SEE TECHNICAL SPECIFICATION 02244.
- EXISTING 6" PVC SHALL BE REMOVED BY CONTRACTOR PRIOR TO INSTALLING NEW 6" PVC TO FLOWMETER VAULT.







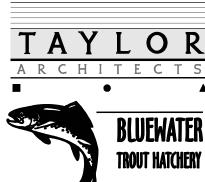
AS-BUILT SET DEC., 2002
PROJECT NUMBER

PLOT INFORMATION
BW9C034A

TER TROUT HATCHERY

AND DEPT FISH WILDLIFF & PARI

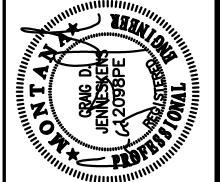
D R A W I N G : ARTESIAN WELL PIPING
P R O J E C T : BLUEWATER TROUT HA
BRIDGER, MONTANA
O W N F R : MONTANA DEPT FISH V



32406 FRONTAGE ROAD BOZEMAN, MONTANA 59715

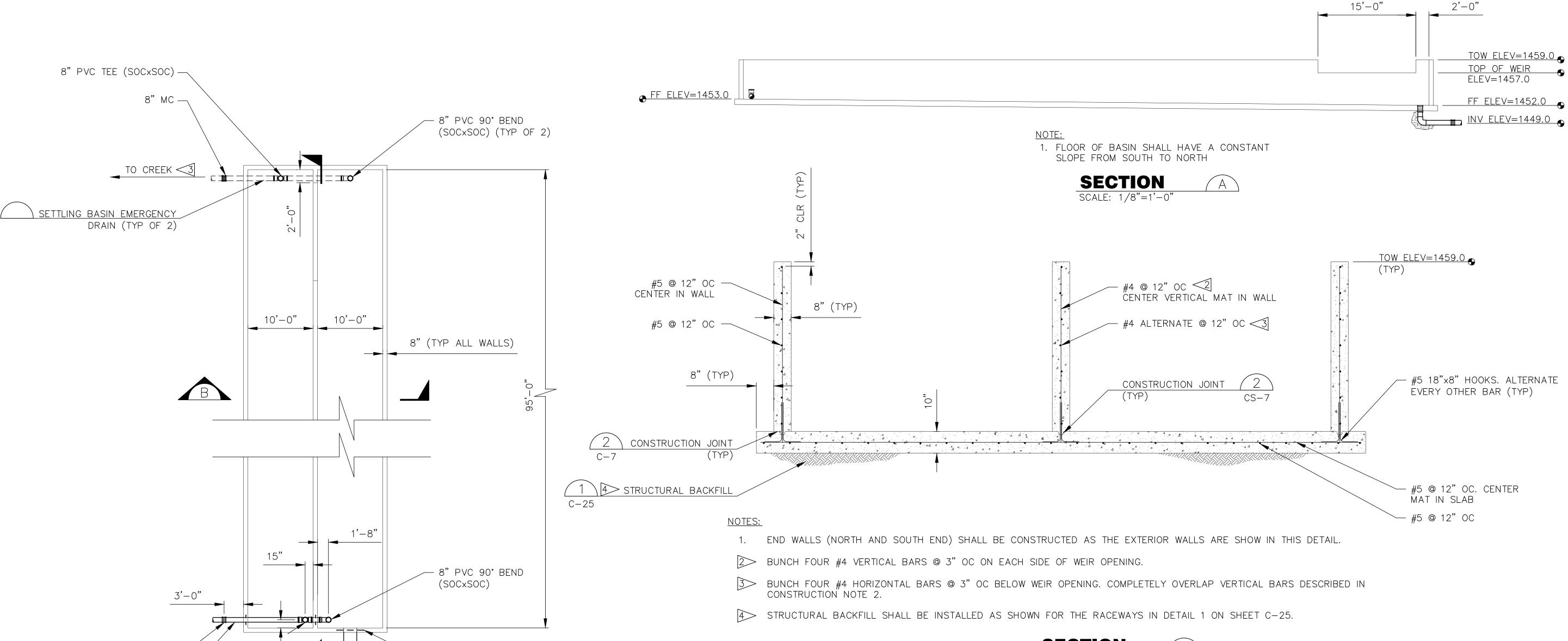
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A/E 93-35-1
CM-19









NOTES:

1> SEE NEW SETTLING BASIN PLAN SHEET CS-8 FOR NEW ALIGNMENT.

8" MC —

6 2 8" PVC OUTLET PIPE

8" PVC TEE (SOCxSOC)

PVC WALL FLANGES SHALL BE CAST INTO THE CENTER OF THE CONCRETE WALLS. INSTALL ALUMINUM STRAP IN CENTER OF WESTERLY BASIN TO SECURE PIPE TO CONCRETE FLOOR.

WALL PIPE

CLEANING PIPE

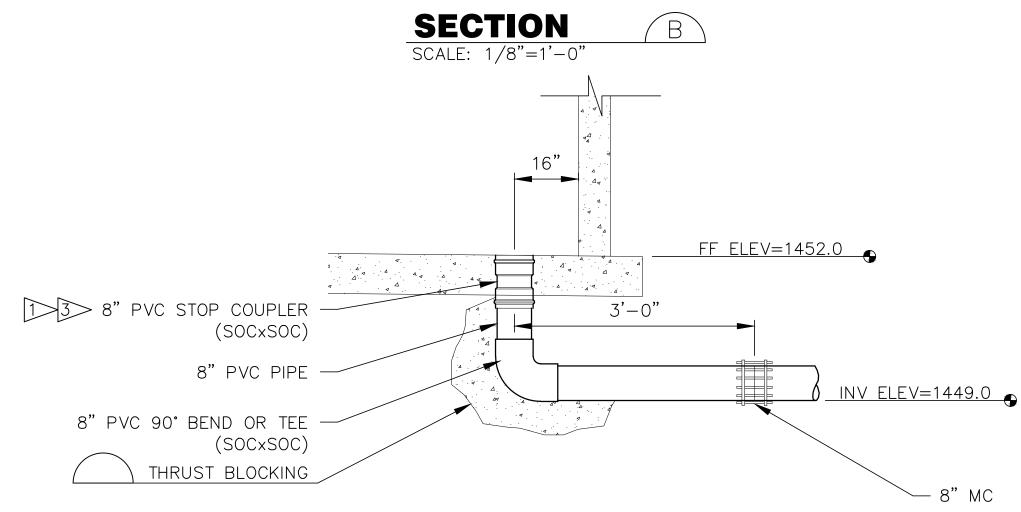
24" PVC LOWER RACEWAY

3> 8" EMERGENCY DRAIN SHALL DAYLIGHT AT INVERT ELEVATION=1448.0. DISTURBANCE TO EXISTING VEGETATION SHALL BE MINIMIZED. EXISTING TREES AND DRAIN LINES SHALL REMAIN UNDISTURBED.

- 4. CAP EXISTING DRAIN CONNECTIONS FROM SETTLING BASIN #1 AND #2 WITHOUT DISTURBING EXISTING HEADER.
- 5. REMOVE EXISTING SETTLING BASIN #1 AND #2. ALL CONCRETE, REBAR, AND DEBRIS SHALL BE HAULED OFF SITE AND PROPERLY DISPOSED OF.

6 SEE NEW PLAN SHEET C-16 FOR NEW ALIGNMENT OF SETTLING BASIN DRAIN.





NOTES:

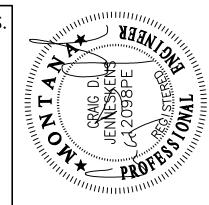
WRAP COUPLER WITH TWO WRAPS OF BENTONITE WATERSTOP AND CAST INTO CONCRETE.

2. ALL FITTING AND PIPE SHALL BE SOLVENT WELD CLASS 160 IPS PVC.

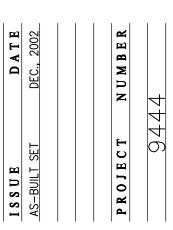
3> STOP COUPLER SHALL BE FLUSH WITH TOP OF CONCRETE.

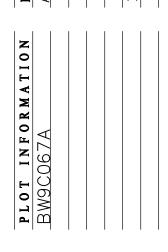
4. HORIZONTAL SECTION OF PIPE ROTATED 90° FOR ILLUSTRATIVE PURPOSES ONLY. PIPE TO BE INSTALLED PARALLEL TO ENDWALL OF SETTLING BASIN.



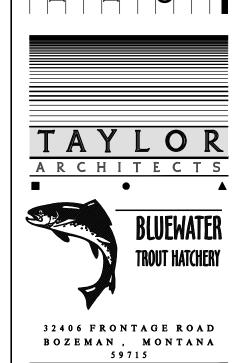


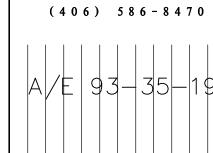






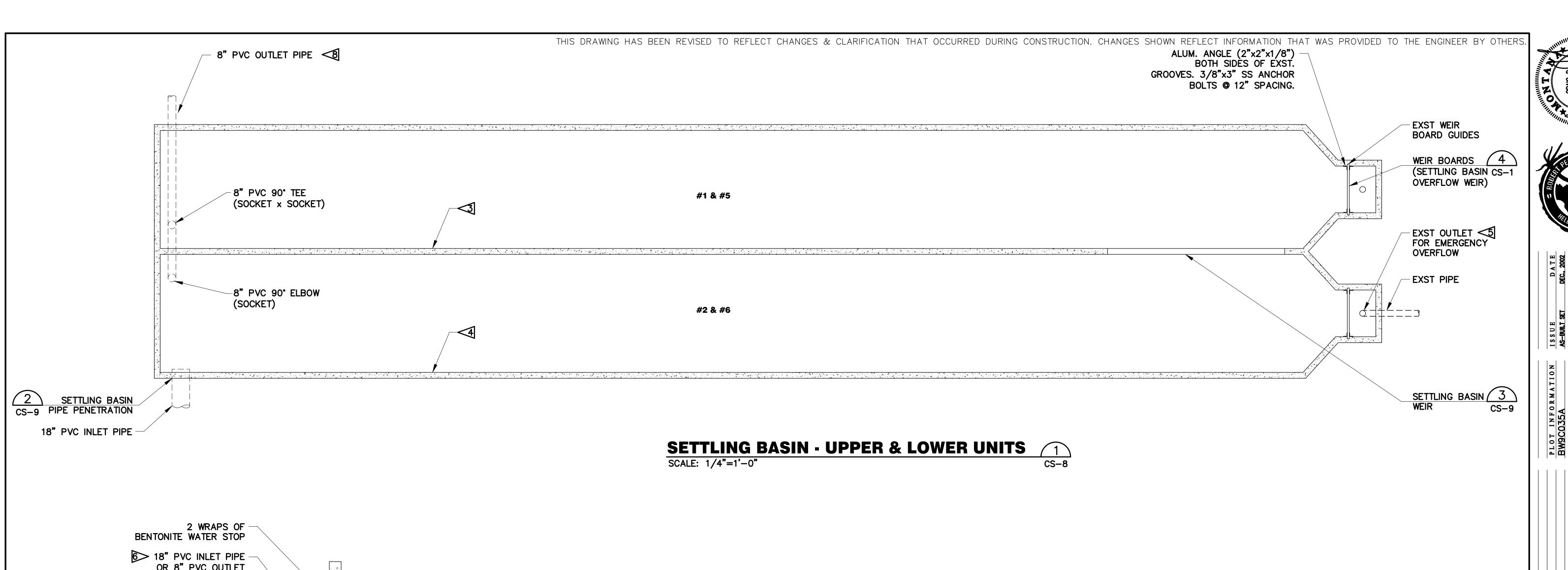


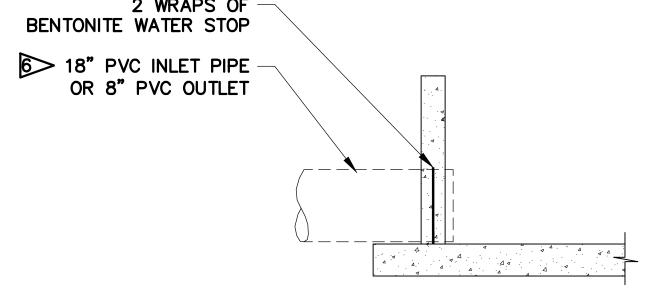




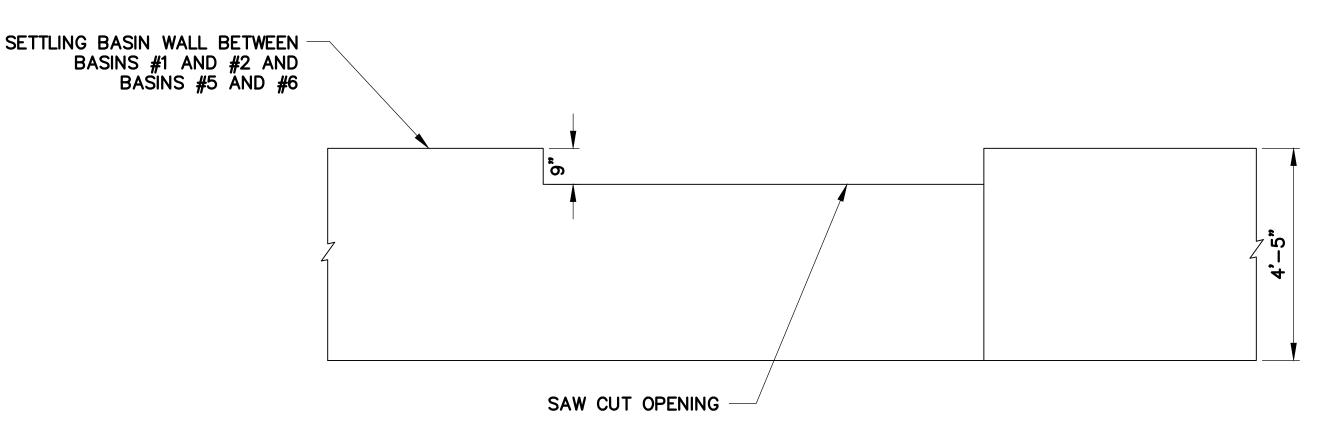
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CS-9.5





SETTLING BASIN PIPE PENETRATIONS SCALE: 1/4"=1'-0" CS-8, 9



NOTE:

1. A 15-FOOT LONG WEIR SHALL BE SAW-CUT IN THE INTERIOR WALLS BETWEEN BASINS #1 AND #2 AND BETWEEN #5 AND #6. THE WEIR SHALL BE LOCATED AS SHOWN. THE SAW CUT SHALL BE FINISHED WITH SIKATOP MORTAR. (SEE TECHNICAL SPECIFICATION 03360-GROUT).

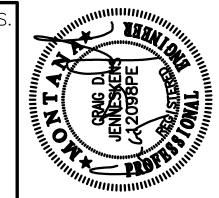
SETTLING BASIN WEIR

SCALE: 1/2"= 1'-0"

CS-9

CONSTRUCTION NOTES:

- 1. EXISTING RACEWAYS ARE BEING RETROFITTED TO SERVE AS SETTLING BASINS FOR CLEANING FLOWS AS PART OF THIS PROJECT. REFER TO SPECIAL PROVISIONS AND TECHNICAL SPECIFICATIONS OF PROJECT DOCUMENTS.
- 2. CONTROL JOINTS (ADDITIVE ALTERNATE #2): THE EXISTING CONTROL JOINTS ON INTERIOR WALLS & FLOORS OF BASINS SHALL BE SEALED WITH A NON-SAG (VERTICAL) AND SELF-LEVELING (HORIZONTAL) FLEXIBLE EPOXY SEALER. THE CONTRACTOR SHALL TRIM FIBER BOARD FROM EXISTING CONTROL JOINTS TO PREPARE A SUITABLE JOINT. FOAM BACKER ROD SHALL BE USED WHERE JOINT DEPTH EXCEEDS SEALER MANUFACTURERS RECOMMENDATIONS. PRIMERS SHALL BE USED AS RECOMMENDED BY SEALER MANUFACTURER. GROUT CONTROL JOINTS ON EXTERIOR WALLS WITH GROUT RATED FOR CRACK FILLING.
- INTERIOR BASIN REHAB (ADDITIVE ALTERNATE #2): THE CONCRETE IN THE INTERIORS OF THE 3 PAIRS OF BASINS SHALL BE SANDBLASTED OR TOOL CLEANED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS SO THAT NO VISIBLE PAINT RESIDUE REMAINS. CRACKS, SPALLING AND DAMAGED CONCRETE SHALL BE REPAIRED WITH POLYMER-MODIFIED, PORTLAND CEMENT MORTAR SUCH AS SIKATOP. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION THICKNESS. WHERE REQUIRED, FORMS SHALL BE USED TO REBUILD WALLS.
- EXTERIOR BASIN REHAB (ADDITIVE ALTERNATE #2): THE CONCRETE ON THE EXTERIOR WALLS OF THE BASINS SHALL BE SANDBLASTED OR TOOL CLEANED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR SHALL APPLY POLYMER-MODIFIED, PORTLAND CEMENT MORTAR TO PATCH DAMAGED CONCRETE. EXTERIOR WALLS SHALL BE COATED WITH A POLYMER-MODIFIED PORTLAND CEMENT COATING SUCH AS SIKATOP 144 TO PROVIDE UNIFORM COATING.
- EXISTING BASIN OUTLETS SHALL BE MAINTAINED. CONTRACTOR SHALL MINIMIZE TRAFFIC OF EQUIPMENT OVER THE EXISTING DISCHARGE PIPING. CONTRACTOR SHALL TEMPORARILY PLUG EXISTING OUTLET PIPE DURING CONSTRUCTION TO PREVENT ANY DEBRIS FROM ENTERING PIPE.
- THE EXISTING EAST WALL OF BASINS #2, #3, & #6 SHALL BE EXPOSED AND JACK—HAMMERED TO PROVIDE AN OPENING FOR THE NEW 18—INCH OR 8—INCH PVC INLET & OUTLET PIPES. THE PIPE SHALL EXTEND 6—INCHES INTO THE BASIN. USE BENTONITE WATERSTOP AROUND PIPE (2 WRAPS). THE WALL OPENING SHALL BE GROUTED AROUND THE PIPE AND BACKFILLED.
- SAND REMOVAL (ADDITIVE ALTERNATE #2): SAND REMAINING FROM SANDBLASTING OPERATIONS AND OTHER CONCRETE DEBRIS FROM REHAB ACTIVITIES SHALL BE COLLECTED BY THE CONTRACTOR AND PROPERLY DISPOSED OF. CONTRACTOR MAY NOT WASH ANY DEBRIS OR SAND INTO EXISTING DISCHARGE PIPING OR INTO BLUEWATER CREEK.
- NEW OUTLET PIPING: THE SOUTHEAST CORNER OF BASINS #1 AND #5 SHALL BE EXPOSED AND JACK-HAMMERED TO PROVIDE AN OPENING FOR THE NEW 8-INCH OUTLET PIPE. USE BENTONITE WATERSTOP AROUND PIPE (2 WRAPS). THE WALL OPENING SHALL BE GROUTED AROUND THE PIPE AND BACKFILLED. OUTLET PIPE SHALL TEE UP IN BASINS #1 AND #5, EXTEND THROUGH WALL INTO BASINS #2 AND #6 AND ELBOW LIP
- 9. ALL WORK SHOWN ON THIS SHEET WITH THE EXCEPTION OF THE INLET & OUTLET PIPING INSTALLATION IS PART OF ADDITIVE ALTERNATE #2.





OJECT NUMBER

AS-BUILT SET

HATCHERY
SH WILDLIFE & PARKS

PROJECT: BLUEWATER TROUT H BRIDGER, MONTANA OWNER: MONTANA DEPT, FISH

SETTLING BASINS

DRAWING:

TAYLOR
ARCHITECTS

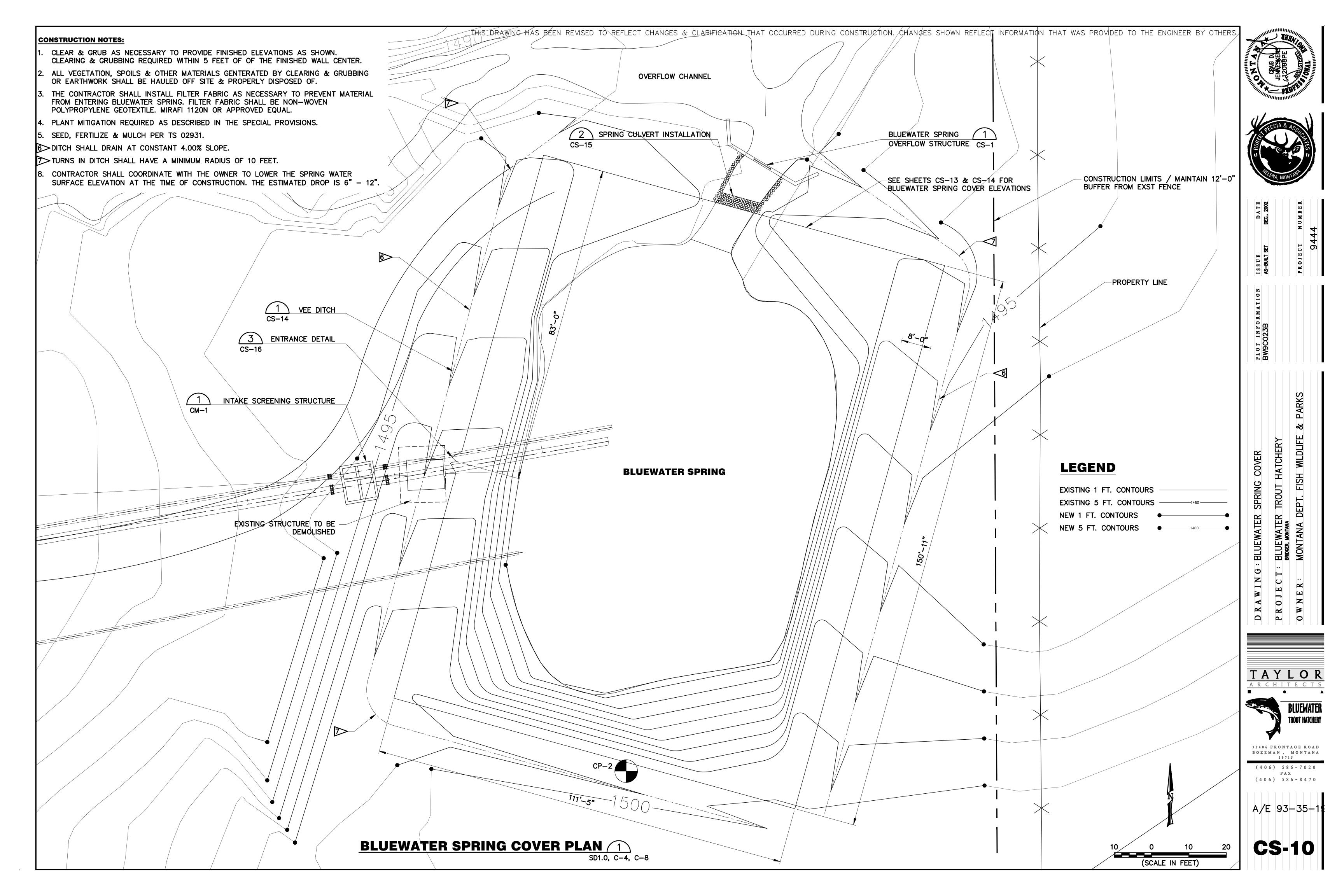
BLUEWATER
TROUT HATCHERY

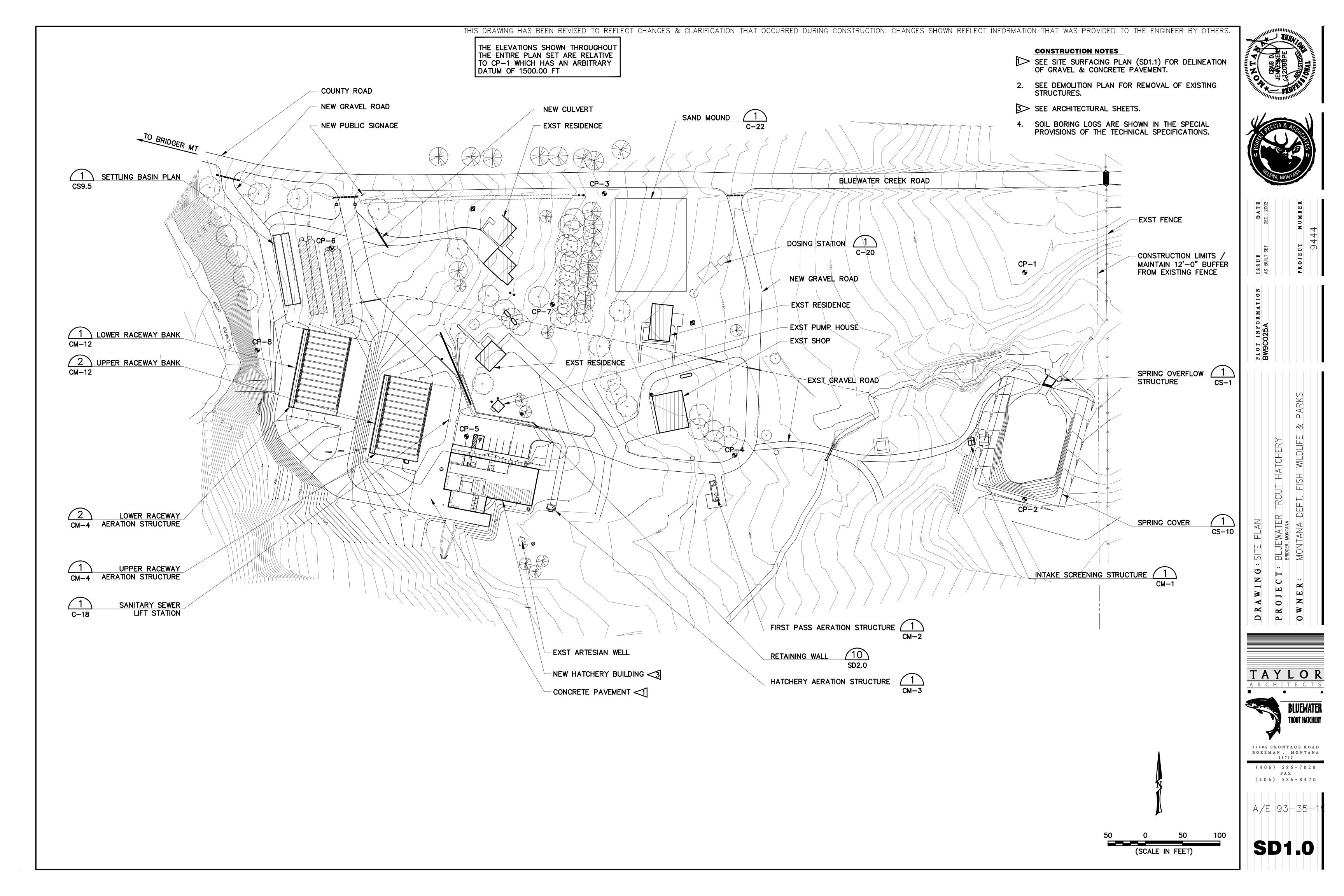
BOZEMAN, MONTANA
59715

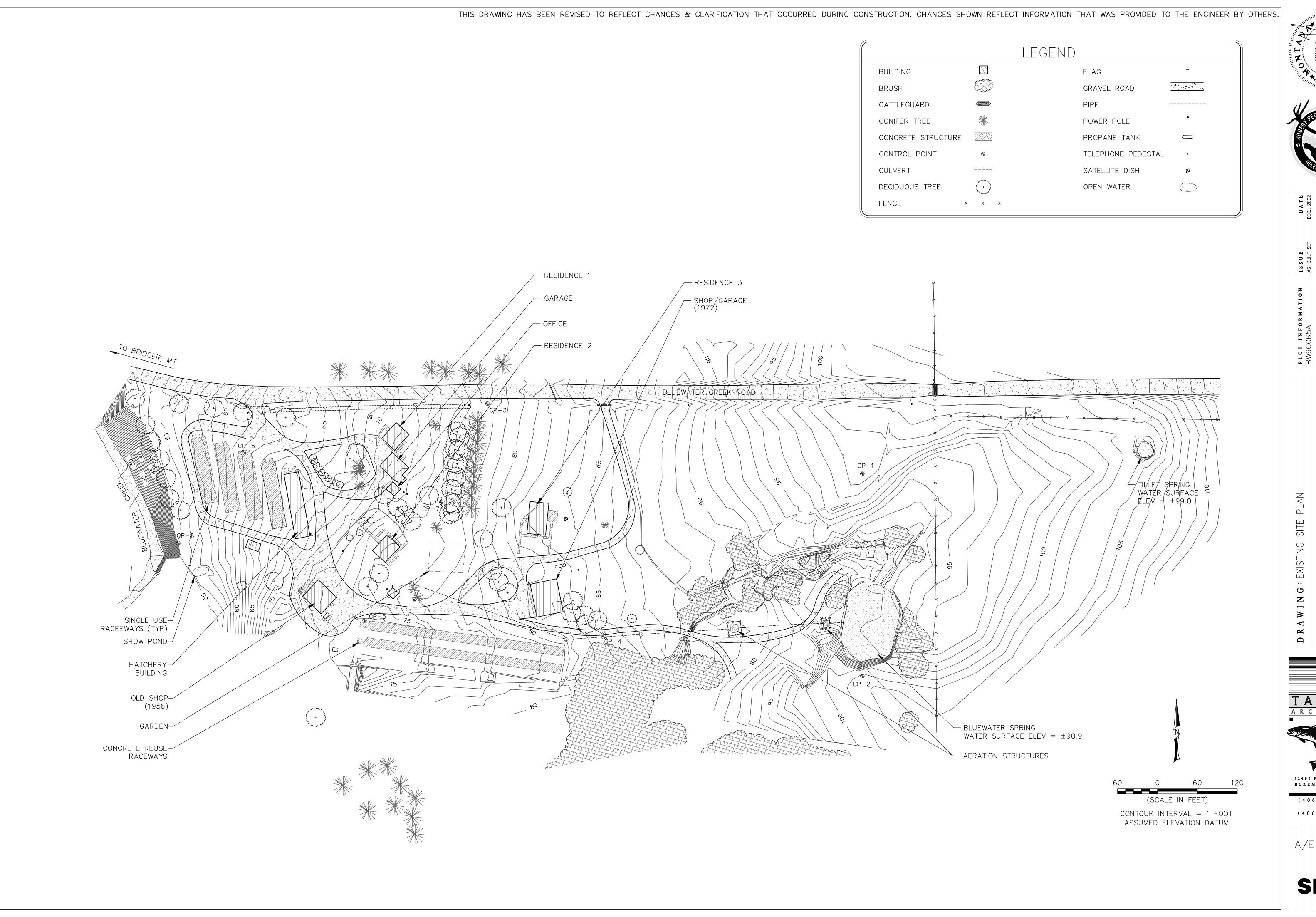
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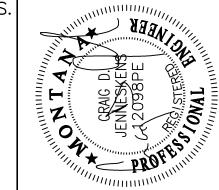
FAX
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A/E 93-35-1 CS-9











ECT NUMBER

9444

BW9C065A

DRAWING: EXISTING SITE PLAN
PROJECT: BLUEWATER TROUT HATCHERY
BRIDGER, MONTANA
DEPT. FISH WILDLIFE & PARE



32406 FRONTAGE ROAD
BOZEMAN, MONTANA
59715

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A/E 93-35-1 SD3-1